

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (currently amended) A recombinant ribonuclease that has (a) measurable ribonuclease activity; (b) ~~an amino terminal end beginning with a glutamine or serine at position 1~~; (c) a leucine at position 11; an asparagine at position 21, a threonine at position 85, and a histidine at position 103, such positions being determined through alignment with reference to those specified amino acid positions of SEQ ID NO:2; and (d) ~~substantial identity at least 80% identity~~ to SEQ ID NO:2.
2. (currently amended) The recombinant ribonuclease of claim 1, further comprising a methionine residue ~~at position 1~~ linked to position 1.
3. (original) The recombinant ribonuclease of claim 2, wherein the methionine residue at position 23 as shown in SEQ ID NO:2 is replaced with a leucine residue.
4. (original) The recombinant ribonuclease of claim 3, further comprising six histidine residues ~~at 1 through 6~~ linked to position 1 (SEQ ID NO:9).
5. (original) The recombinant ribonuclease of claim 1, wherein the glutamine at position 1 is cyclized to pyroglutamic acid.
6. (currently amendment) The recombinant ribonuclease of claim 1, wherein the glutamine residue at position 1 is ~~replaced with~~ a serine.
7. (original) A cytotoxic reagent comprising the recombinant ribonuclease of claim 1, linked to a ligand binding moiety.

8. (currently amended) The cytotoxic reagent of claim 7, further comprising a methionine residue linked to at position 1.

9. (original) The cytotoxic reagent of claim 8, wherein the methionine residue at position 23 as shown in SEQ ID NO:2 is replaced with a leucine residue.

10. (currently amended) The cytotoxic reagent of claim 9, further comprising six histidine residues at 1 through 6 linked to position 1.

11. (original) The cytotoxic reagent of claim 7, wherein the glutamine at position 1 is cyclized to pyroglutamic acid.

12. (currently amended) The ~~recombinant~~ ribonuclease of claim 1, wherein the glutamine residue at position 1 is ~~replaced with~~ a serine.

13. (original) The cytotoxic reagent of claim 7, wherein the ribonuclease of SEQ ID NO:2 is linked to a ligand binding moiety through a covalent bond.

14. (original) The cytotoxic reagent of claim 13, wherein said covalent bond is at the carboxy terminus of the ribonuclease of SEQ ID NO:2.

15. (original) The cytotoxic reagent of claim 7, wherein said ligand binding moiety is an antibody directed against a cell surface antigen present on a cancer cell.

16. (original) The cytotoxic reagent of claim 15, wherein said antibody is a recombinant single chain antibody.

Claims 17-33 (cancelled)

16 34. (currently amended) A pharmaceutical composition comprising a ribonuclease expressed from recombinant DNA, said ribonuclease comprising a sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, ~~SEQ ID NO:8, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, SEQ ID NO:24, and SEQ ID NO:8 SEQ ID NO:26~~ in a pharmaceutically acceptable carrier.

17 35. (previously presented) The pharmaceutical composition of claim 34, further comprising an antineoplastic.

15 36. (previously presented) The pharmaceutical composition of claim 35, where said antineoplastic is Adriamycin.

16 37. (currently amended) A pharmaceutical composition comprising a cytotoxic reagent, said cytotoxic reagent comprising a sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, ~~SEQ ID NO:8, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, SEQ ID NO:24~~ and SEQ ID NO:8 SEQ ID NO:26 in a pharmaceutically acceptable carrier.

20 38. (currently amended) A method of killing cancer cells comprising contacting cells to be killed with a ribonuclease expressed by recombinant DNA and having a sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, ~~SEQ ID NO:8, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, SEQ ID NO:24~~ and SEQ ID NO:8 SEQ ID NO:26.

21 39. (currently amended) A method of killing cancer cells comprising contacting cells to be killed with a cytotoxic reagent expressed by recombinant DNA, comprising a sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6,

~~SEQ ID NO:8, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, SEQ ID NO:24 and SEQ ID NO:8 SEQ ID NO:26~~ covalently linked to a ligand binding moiety, said ligand binding moiety directed against a cell surface antigen on the cancer cells.

40. (cancelled)

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~~22~~ 41. (original) The method of claim ~~39~~, wherein said ligand binding moiety is an antibody.

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~~23~~ 42. (original) The method of claim ~~41~~, wherein said antibody is a single chain antibody.

Claims 43 and 44 (cancelled)